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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,582	08/20/2001	Mohammad Torabi	21994/235784	5639

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GREENBERG TRAURIG, LLP  
MET LIFE BUILDING  
200 PARK AVENUE  
NEW YORK, NY 10166

EXAMINER
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BATURAY, ALICIA

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/933,582

Applicant(s)

TORABI, MOHAMMAD

Examiner

Alicia Baturay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. This Office Action is in response to the amendment filed 17 March 2005.
2. No claims were amended.
3. Claims 1-19 are pending in this Office Action.

### ***Response to Amendment***

4. The objection to the specification was addressed and is withdrawn.
5. Applicant's arguments have been fully considered but they are not persuasive for the reasons set forth below.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5, 7-8, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng et al. (U.S. US 6,731,314).
3. As to claim 1, Cheng discloses a virtual reality system, comprising: at least one virtual reality environment user equipment (Cheng, Fig. 2, element 8); at least one virtual reality

environment core system in wireless communication (Cheng, col. 24, line 18) with the at least one virtual reality environment user equipment (Cheng, Fig. 2, element 10; col. 10, lines 35-39); and a virtual reality environment episode management entity, in communication with the at least one virtual reality environment core system, where the virtual reality environment episode management entity is operative to forward virtual reality data representing an environment to the at least one virtual reality environment user equipment, thereby facilitating a virtual reality episode (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

4. As to claim 2, Cheng discloses the invention substantially as described in claim 1, including the virtual reality system where the at least one virtual reality environment user equipment is operative to capture the virtual reality data in real-time (Cheng, col. 10, lines 45-47).
5. As to claim 3, Cheng discloses the invention substantially as described in claim 1, including the virtual reality system where the at least one virtual reality environment user equipment is operative to display the virtual reality data in real-time (Cheng, col. 4, lines 14-15).
6. As to claim 5, Cheng discloses the invention substantially as described in claim 1, including the virtual reality system where the virtual reality episode is conducted between a plurality of virtual reality environment user equipment (Cheng, col. 4, lines 25-27).

7. As to claim 7, Cheng discloses the invention substantially as described in claim 1, including the virtual reality system where one of the at least one virtual reality core systems comprises a virtual reality entity subscription database (Cheng, col. 19, lines 18-43).
8. As to claim 8, Cheng discloses the invention substantially as described in claim 1, including the virtual reality system where the virtual reality environment episode management entity is located within one of the at least one virtual reality environment core system (Cheng, Fig. 2, element 10).
9. As to claim 16, Cheng discloses a virtual reality system that enables the real-time conduction of a virtual reality episode (Cheng, col. 5, lines 39-41), comprising: at least one virtual reality environment user equipment (VUE), associated with at least one user (Cheng, Fig. 2, element 8); at least one virtual reality environment core system (VCS) (Cheng, Fig. 2, element 10; col. 10, lines 35-38), where the at least one VCS has a pre-existing relationship with one of the at least one VUE and the at least one user (Cheng, col. 16, lines 48-49); and a virtual reality environment episode management entity (VEME), in communication with the at least one user and the VCS, where the VEME forwards real-time virtual reality data representative of an actual physical environment to the at least one VUE associated with the at least one user (Cheng, Fig. 2, element 10; col. 17, lines 54-62).
10. Claims 17-19 are rejected under 35 U.S.C. 102(e) as being unpatentable over French et al. (U.S. 6,308,565).

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11. As to claim 17, French discloses a method of participating in a real-time virtual reality episode, comprising; providing a virtual reality environment (VRE) user equipment, where the VRE user equipment captures virtual reality data representing an actual physical environment associated with a first user (French, Fig. 2; col. 9, lines 6-9); and wirelessly transmitting (French, col. 8, lines 54-58) the virtual reality data to a second user participating in the virtual reality episode, where the second user is geographically remote from the first user (French, Fig. 20; col. 33, lines 9-11).
12. As to claim 18, French discloses the invention substantially as described in claim 17, including further comprising receiving, from the second user, data representing one or more actions performed by the second user (French, col. 12, lines 6-17).
13. As to claim 19, French discloses the invention substantially as described in claim 17, including where wirelessly transmitting occurs automatically after the VRE user equipment captures the virtual reality data (French, col. 8, lines 54-62).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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15. Claims 4, 6, and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng and further in view of French.
16. As to claim 4, Cheng discloses a virtual reality system (Cheng, col. 4, lines 1-10), but does not expressly disclose the rendering of a physical environment. However, French teaches the environment as an actual physical environment (French, Fig. 2; col. 9, lines 6-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to model physical locations within a virtual reality system in order to create an accurate simulation of real world events (French, col. 2, lines 2-3).
17. As to claim 6, the combination of Cheng and French (Cheng-French) discloses the invention substantially including the virtual reality system further comprising a virtual reality environment access system, where the virtual reality environment access system facilitates the wireless communication of the at least one virtual reality environment user equipment with the at least one virtual reality environment core system (French, col. 8, lines 54-58).
18. As to claim 9, Cheng-French discloses a method of enabling the real-time conduction of a real-time virtual reality episode (Cheng, col. 5, lines 39-41), comprising: receiving real time virtual reality data at a virtual reality environment (VRE) episode management entity (Cheng, col. 10, lines 35-39), where the virtual reality data is representative of an actual physical environment (French, Fig. 2; col. 9, lines 6-9); determining, at the VRE episode management entity, that the virtual reality data is associated with a virtual reality episode.

(Cheng, col. 16, lines 50-51); and forwarding at least a portion of the virtual reality data to a VRE user equipment participating in the virtual reality episode (Cheng, Fig. 2, element 10; col. 17, lines 54-62), where the VRE user equipment is in wireless communication with the VRE episode management entity (French, col. 8, lines 54-58).

19. As to claim 10, Cheng-French discloses the invention substantially as described in claim 9, including further comprising capturing in real time virtual reality data representative of an actual physical environment prior to receiving the real time virtual reality data at a virtual reality environment (VRE) episode management entity (Cheng, col. 18, lines 25-26).
20. As to claim 11, Cheng-French discloses the invention substantially as described in claim 10, including where capturing in real time virtual reality data comprises capturing real time audio associated with the actual physical environment (Cheng, col. 16, lines 50-51).
21. As to claim 12, Cheng-French discloses the invention substantially as described in claim 10, including where capturing in real time virtual reality data comprises capturing in real time virtual reality data representative of an actual physical environment located geographically distant from the VRE user equipment (French, col. 9, lines 4-22).
22. As to claim 13, Cheng-French discloses the invention substantially as described in claim 9, including further comprising identifying the VRE user equipment as participating in the



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virtual reality episode prior to forwarding at least a portion of the virtual reality data to the VRE user equipment (Cheng, col. 16, lines 48-49).

23. As to claim 14, Cheng-French discloses the invention substantially as described in claim 9, including further comprising determining the location of the VRE user equipment prior to forwarding at least a portion of the virtual reality data to the VRE user equipment (Cheng, col. 17, lines 63-67).

24. As to claim 15, Cheng-French discloses the invention substantially as described in claim 9, including where determining the location of the VRE user equipment comprises querying a database for the location of the VRE user equipment (Cheng, col. 18, line 55- col. 19, line 2).

#### ***Response to Arguments***

25. Applicant's arguments filed 17 March 2005 have been fully considered but they are not persuasive for the reasons set forth below.

26. ***Applicant Argues:*** Applicant states "Cheng makes no mention or suggestion of a virtual reality system much less a virtual reality episode between two users over disperse geographical locations as recited in claim 1 of the present invention."

***In Response:*** The examiner respectfully submits that Applicant defines a virtual reality environment (VRE) on page 3 of the specification as "the presentation and presence of the

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sounds and sights of an actual and complex physical environment virtually available everywhere in real-time through the use of VRE capable networks and devices.” Cheng teaches a server with APIs that allow a visual and audio representation (the presentation and presence of sounds and sights – see Cheng, col. 16, lines 50-51) of complex and dynamic 3D worlds (of an actual and complex physical environment – see Cheng, col. 6, lines 61-63; col. 7, lines 18-27) that can be encoded and sent across the network to many other users in real time (virtually available everywhere in real-time through the use of VRE capable networks and devices – see Cheng, col. 10, lines 45-47; col. 4, lines 14-15).

Applicant defines a virtual reality episode on page 3 of the specification as “the presentation of virtual reality data to a user via VRE user equipment, where virtual reality data includes audio, video, textual, and like data representing an environment, such as an actual physical environment.” Cheng teaches a server with APIs that allow a visual and audio representation (the presentation of virtual reality data to a user – see Cheng, col. 16, lines 50-51) that can be viewed and interacted with via a browser on a client computer (via VRE user equipment – see Cheng, col. 4, lines 25-27), where the data represented is made up of 3D visualizations and spatialized, 3D sound that form complex, dynamic 3D worlds (where virtual reality data includes audio, video, textual, and like data representing an environment, such as an actual physical environment – see Cheng, col. 6, lines 61-63; col. 7, lines 18-27). Therefore the rejection is proper, and stands.

27. ***Applicant Argues:*** Applicant states “the French system does not facilitate the setup and conduction of a virtual reality episode in real time as contemplated by the present invention.”

***In Response:*** The examiner respectfully submits that French teaches an interactive virtual reality system that determines the coordinates of a user in the defined physical space in real time (the setup and conduction of a virtual reality episode in real time – see French, col. 8, lines 51-62; col. 11, lines 4-8) and in which multiple users can participate in simultaneously in separate physical spaces (between two users over disperse geographical locations – see French, col. 33, lines 9-11). Therefore the rejection is proper, and stands.

*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay  
May 25, 2005



SALEH NAJJAR  
PRIMARY EXAMINER